

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A method for rendering a graphical user interface (GUI), comprising:

providing for a representation of the GUI as a set of controls wherein the controls are organized in a logical hierarchy;

traversing the representation, wherein the traversing comprises:

associating a theme control with a first control in the set of controls;

rendering the first control according to a theme set by the theme control;

rendering any descendents of the first control according to the theme;

wherein ~~any descendents~~ an additional theme control which is an descendent of the first control can override the theme; ~~and~~

~~wherein one of the set of controls can communicate with another of the set of controls;~~

~~wherein the another of the set of controls registers to receive an event raised by the one of the set of controls and wherein when the one of the controls raises the event, the another of the controls handles the event using a callback mechanism~~

wherein the theme control and additional theme control are part of the logical hierarchy;  
and

wherein one of the set of controls can communicate with another of the set of controls.

2. (Original) The method of claim 1 wherein:

one of the set of controls can respond to an event raised by another of the set of controls.

3. (Original) The method of claim 1 wherein:

a control can have an interchangeable persistence mechanism.

4. (Original) The method of claim 1 wherein:

a control can have an interchangeable rendering mechanism.

5. (Original) The method of claim 1, further comprising:

accepting a request.

6. (Original) The method of claim 5 wherein:

the request in a hypertext transfer protocol (HTTP) request.

7. (Original) The method of claim 5 wherein:

the request originates from a Web browser.

8. (Original) The method of claim 1, further comprising:

generating a response.

9. (Original) The method of claim 1 wherein:

an control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

10. (Original) The method of claim 1 wherein:

associating the theme with the first control can occur when the first control is rendered.

11. (Original) The method of claim 1 wherein:

the first control inherits the theme from a parent control.

12. (Original) The method of claim 1 wherein:

the theme specifies the appearance and/or functioning of an control in the GUI.

13. (Original) The method of claim 1 wherein:

rendering the first control according to the theme can be accomplished in parallel with rendering of other controls.

14. (Original) The method of claim 1 wherein:

the theme can be specified in whole or in part by a properties file.

15. (Original) The method of claim 14 wherein:

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

16. (Original) The method of claim 14 wherein:

the properties file can specify at least one image.

17. (Original) The method of claim 1 wherein:

the GUI is part of a portal on the World Wide Web.

18. (Currently Amended) A method for rendering a graphical user interface (GUI), comprising:

accepting a request;

mapping the request to a set of controls that represent the GUI, and wherein the controls are organized in a logical hierarchy;

traversing the representation, wherein the traversing comprises:

associating a theme control with a first control in the set of controls;

rendering the first control according to a theme set by the theme control;

rendering any descendents of the first control according to the theme set by the theme control; and

wherein any descendents of the first control can override the theme of the theme control;

~~wherein another of the set of controls registers to receive an event raised by one of the set of controls and wherein when the one of the controls raises the event, the another of the controls handles the event using a callback mechanism~~

wherein the theme control and additional theme control are part of the logical hierarchy.

19. (Original) The method of claim 18 wherein:

the request in a hypertext transfer protocol (HTTP) request.

20. (Original) The method of claim 18 wherein:  
the request originates from a Web browser.
21. (Original) The method of claim 18, further comprising:  
generating a response.
22. (Previously Presented) The method of claim 18 wherein:  
one of the set of controls can respond to an event raised by another of the set of controls.
23. (Previously Presented) The method of claim 18 wherein:  
a control can have an interchangeable persistence mechanism.
24. (Previously Presented) The method of claim 18 wherein:  
a control can have an interchangeable rendering mechanism.
25. (Original) The method of claim 18 wherein:  
an control can represent one of: button, text field, menu, table, window, window control,  
title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head,  
body, header, footer, book, page, layout, placeholder, portlet and toggle button.
26. (Original) The method of claim 18 wherein:  
associating a theme with the first control can occur when the first control is rendered.

27. (Original) The method of claim 18 wherein:

the first control inherits the theme from a parent control.

28. (Original) The method of claim 18 wherein:

the theme specifies the appearance and/or functioning of an control in the GUI.

29. (Original) The method of claim 18 wherein:

rendering the first control according to the theme can be accomplished in parallel with rendering of other controls.

30. (Original) The method of claim 18 wherein:

the theme can be specified in whole or in part by a properties file.

31. (Original) The method of claim 30 wherein:

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

32. (Original) The method of claim 30 wherein:

the properties file can specify at least one image.

33. (Original) The method of claim 18 wherein:

the GUI is part of a portal on the World Wide Web.

34. (Currently Amended) A method for rendering a graphical user interface (GUI), comprising:

providing for a representation of the GUI as a plurality of controls wherein the controls are organized in a logical hierarchy;

traversing the representation, wherein the traversing comprises:

associating a first theme control with a first control in the plurality of controls;

rendering the first control according to a first theme set by the first theme control;

associating a second theme control with a second control in the plurality of controls;

rendering the second control according to a second theme set by the second theme control; and

wherein the second control is a descendant of the first control;

wherein the first theme control and the second theme control are part of the logical hierarchy

~~wherein another of the set of controls registers to receive an event raised by one of the set of controls and wherein when the one of the controls raises the event, the another of the controls handles the event using a callback mechanism.~~

35. (Original) The method of claim 34, further comprising:

accepting a request.

36. (Original) The method of claim 35 wherein:

the request in a hypertext transfer protocol (HTTP) request.

37. (Original) The method of claim 35 wherein:

the request originates from a Web browser.

38. (Original) The method of claim 34, further comprising:

generating a response.

39. (Previously Presented) The method of claim 34 wherein:

the first control can respond to an event raised by the second control.

40. (Previously Presented) The method of claim 34 wherein:

an control can have an interchangeable persistence mechanism.

41. (Previously Presented) The method of claim 34 wherein:

an control can have an interchangeable rendering mechanism.

42. (Original) The method of claim 34 wherein:

an control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

43. (Original) The method of claim 34 wherein:



the first control inherits the first theme from a parent control.

44. (Original) The method of claim 34 wherein:

the first theme specifies the appearance and/or functioning of the first control in the GUI.

45. (Original) The method of claim 34 wherein:

the rendering the first control can be accomplished in parallel with the rendering of the second control.

46. (Original) The method of claim 34 wherein:

a theme can be specified in whole or in part by a properties file.

47. (Original) The method of claim 46 wherein:

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

48. (Original) The method of claim 46 wherein:

the properties file can specify at least one image.

49. (Original) The method of claim 34 wherein:

the GUI is part of a portal on the World Wide Web.

50. (Currently Amended) A machine readable medium having instructions stored thereon that when executed by a processor cause a system to:

provide for a representation of the GUI as a set of controls wherein the controls are organized in a logical hierarchy;

traverse the representation, wherein the traversing comprises instructions to cause the system to:

associate theme control with a first control in the set of controls;

render the first control according to a theme set by the theme control;

render any descendents of the first control according to the theme set by the theme control;

wherein ~~any descendents~~ an additional theme control which is a descendent of the first control can override the theme; and

wherein one of the set of controls can communicate with another of the set of controls;

wherein the theme control and additional theme control are part of the logical hierarchy

~~wherein the another of the set of controls registers to receive an event raised by the one of the set of controls and wherein when the one of the controls raises the event, the another of the controls handles the event using a callback mechanism.~~

51. (Original) The machine readable medium of claim 50 wherein:

one of the set of controls can respond to an event raised by another of the set of controls.

52. (Original) The machine readable medium of claim 50 wherein:

a control can have an interchangeable persistence mechanism.

53. (Original) The machine readable medium of claim 50 wherein:

a control can have an interchangeable rendering mechanism.

54. (Original) The machine readable medium of claim 50, further comprising instructions that when executed cause the system to:

accept a request.

55. (Original) The machine readable medium of claim 54 wherein:

the request in a hypertext transfer protocol (HTTP) request.

56. (Original) The machine readable medium of claim 54 wherein:

the request originates from a Web browser.

57. (Original) The machine readable medium of claim 50, further comprising instructions that when executed cause the system to:

generate a response.

58. (Original) The machine readable medium of claim 50 wherein:

an control can represent one of: button, text field, menu, table, window, window control, title bar, pop-up window, check-box button, radio button, window frame, desktop, shell, head, body, header, footer, book, page, layout, placeholder, portlet and toggle button.

59. (Original) The machine readable medium of claim 50 wherein:

associating the theme with the first control can occur when the first control is rendered.

60. (Original) The machine readable medium of claim 50 wherein:

the first control inherits the theme from a parent control.

61. (Original) The machine readable medium of claim 50 wherein:

the theme specifies the appearance and/or functioning of an control in the GUI.

62. (Original) The machine readable medium of claim 50 wherein:

rendering the first control according to the theme can be accomplished in parallel with rendering of other controls.

63. (Original) The machine readable medium of claim 50 wherein:

the theme can be specified in whole or in part by a properties file.

64. (Original) The machine readable medium of claim 63 wherein:

the properties file can include at least one of: 1) cascading style sheet; 2) Java Server Page; 3) Extensible Markup Language; 4) text; 5) Hypertext Markup Language; 6) Extensible Hypertext Markup Language; 7) JavaScript; and 8) Flash MX.

65. (Original) The machine readable medium of claim 63 wherein:

the properties file can specify at least one image.

66. (Original) The machine readable medium of claim 50 wherein:

the GUI is part of a portal on the World Wide Web.

67. (Currently Amended) A computer readable storage medium, comprising:

a code segment including instructions to provide for a representation of the GUI as a set of controls wherein the controls are organized in a logical hierarchy;

a code segment including instructions to traverse the representation comprising:

a code segment including instructions to associate theme control with a first control in the set of controls;

a code segment including instructions to render the first control according to a theme set by the theme control;

a code segment including instructions to render any descendents of the first control according to the theme;  
wherein ~~any descendents~~ an additional theme control which is a descendent of the first control can override the theme of the theme control; and

wherein one of the set of controls can communicate with another of the set of controls;

wherein the theme control and additional theme control are part of the logical hierarchy

~~wherein the another of the set of controls registers to receive an event raised by the one of the set of controls and wherein when the one of the controls raises the event, the another of the controls handles the event using a callback mechanism.~~